

19980528.ba v02_n071.bam.980528 v02_n072.bam.980528

>From ???@??? Fri May 29 04:22:05 1998
Message-Id: <199805281434.JAA13490@sco.theporch.com>
Date: Thu, 28 May 1998 09:31:32 CDT
Subject: BOATANCHORS digest 2071

BOATANCHORS Digest 2071

Topics covered in this issue include:

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by Ralph Parker <rparker@istar.ca>
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by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 7) Re: Testing tubes
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- 8) Grimeton 0915 -0945
by "Thomas A. Adams" <103360.2133@compuserve.com>
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by Dexter Francis <cwest@xmission.com>
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by Dexter Francis <cwest@xmission.com>
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- 13) Re: Black wrinkle- help!
by Sandra L Knepper <slkst29+@pitt.edu>
- 14) Re: Need a Coulomb Calculating Whiz
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- 15) Re: Mackay Radio model 3010-B
by Raymond Cote <rcote@pixi.com>
- 16) Re: Need a Coulomb Calculating Whiz
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 17) Re: Need a Coulomb Calculating Whiz
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
- 18) Re: Who Tests Xmtg Tubes???
by "Roberta J. Barmore" <rbarmore@indy.net>
- 19) Re: Black wrinkle- help!

- by Lenox Carruth <carruth@swbell.net>
- 20) Re: Need a Coulomb Calculating Whiz
by "Mike Feher" <n4fs@monmouth.com>
- 21) Re: Need a Coulomb Calculating Whiz
by "Roberta J. Barmore" <rbarmore@indy.net>
- 22) Re: Black wrinkle- help!
by "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>
- 23) Thanks to all for AWA Review #1
by "Don Buska" <d.buska@aaiate.com>
- 24) Patching Wrinkle Paint
by arc5@ix.netcom.com
- 25) Regen. S'het articles annotated.
by MNHopkins@aol.com

Date: Wed, 27 May 1998 21:09:56 -0700 (PDT)
Message-Id: <2.2.16.19980527210722.3c7f7de2@pop.igc.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>
Subject: Vintage Field Day Plans

It looks like we have a plan for Vintage Field day, we being Tom Horsfall/WA6OPE and myself - with maybe a couple of others. We plan to be on the air from a small hilltop in Novato, north of San Francisco, and begin operation at the starting time for the event wich is 7pm local time Saturday June 13th.

I'll be using my AN/GRC-9 and DY-88 dynamotor running from a 12V storage battery primarily on 40m CW. Tom may bring his BC-1306 and operate on 80m.

Contacts with any members of the BA list will get a special gold star in the log.

73,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Message-ID: <356CF96A.B391051A@gil.com.au>
Date: Thu, 28 May 1998 15:43:06 +1000
From: Dave Prince <davprin@gil.com.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: name that tube
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Morris Odell wrote:

> Hi all,
>
> I posted this request a week or two ago at the time of Dayton, and
> didn't get a reply so I'll try once more:
>
> Here are a couple of mystery tubes for you to exercise your reference
> libraries with:
>
> 1. CV5311 a.k.a. M8248. 7 pin miniature with unusual internal structure
> ? triode.

Yep, it's a triode. CV5311 - M8248 - EC98 - 6J4WA

>
>
> 2. Raytheon 5517. 7 pin miniature with top cap and exhaust teat on the
> side. No getter, internal structure looks like thyatron or HV
> rectifier. The lead into the electrode cylinder from the top cap is glass
> sheathed. there's also a glass sheathed lead into it from one of the base
> pins.

Cold cathode rectifier. 5517 - CK1013 - CV3609

According to TUBEDATA by Ake Holm. See my other post re this very
comprehensive tube/valve database.

--
Dave Prince VK4KDP Brisbane, Queensland, Australia
davprin@gil.com.au
<http://www.home.gil.com.au/~davprin>

Collector and restorer of Military Radio, Signalling Equipment and
WW2 Canadian Military Pattern (CMP) Vehicles.

Message-ID: <356CFBB1.56EEC327@gil.com.au>
Date: Thu, 28 May 1998 15:52:49 +1000
From: Dave Prince <davprin@gil.com.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: TUBEDATA Database
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello All,

Just got this computer program called
TUBEDATA written by Ake Holm.

It's a database listing 27,000 plus tubes/valves. My copy
came from A.R.C. (their Website is
<http://www.antiqueradio.com/>). Their leaflet says this about
TUBEDATA:-

"The most comprehensive list of vacuum tubes and data in an
easy-to-use program for IBM compatibles. 27,000 plus tubes,
includes receiving and transmitting tubes, Lists function,
manufacturer, technical data, & more. (3 1/2" disk) \$39.95"

It's a Dos based program and has a split screen so that the
information about two tubes may be compared on screen
simultaneously. Also gives pin connections.

I have no connection to the writer or the seller - just very
happy with the product.

--

Dave Prince VK4KDP Brisbane, Queensland, Australia
davprin@gil.com.au
<http://www.home.gil.com.au/~davprin>

Collector and restorer of Military Radio, Signalling
Equipment and
WW2 Canadian Military Pattern (CMP) Vehicles.

Date: Wed, 27 May 1998 23:30:55 -0700 (PDT)
Message-Id: <2.2.16.19980527232822.327f8442@pop.igc.org>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>
Subject: Knob Polishing

Sometimes it just keeps on getting better. As I settled in to a quiet evening of knob polishing on the AR-88LF it seemed only fitting that the west coast AM net on 3870kc. should be tuned in during the work. Either the '88 really is the outstanding receiver people say or propagation was exceptionally good tonight but I could hear almost everyone with good signals. I choose to believe it was due to the radio. By the time I was down to the A.F. Gain control the fellows had just about talked themselves out so I shifted up to the 6Mc. shortwave band. There the BBC Waveguide program was by chance presenting a very interesting report on the National Vintage Communications Fair in Birmingham, complete with interviews with enthusiastic valve salesmen and military radio collectors. Not a bad way to spend an evening - if you're into that kind of thing of course.

73,

Dick

Dick Dillman
<ddillman@igc.apc.org>
WPE2VT W6AWO
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Message-Id: <3.0.5.16.19980527234838.0aef2176@istar.ca>
Date: Wed, 27 May 1998 23:48:38 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Ralph Parker <rparker@istar.ca>
Subject: Signal generators
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi gang:

Before the Sig.Gen thread dissolves, I found a McMurdo Silver Model 906 sig.gen. a few months ago. Finally got the case off, and was pleasantly surprised. This aint no Heathkit (God rest their chassis). Oscillator in a very shielded copper box. 6 tubes that I can see, a light bulb so the electrons can see their way around, meter, nice dial, knobs, etc. Looks in

*** CWest - P.O. Box 22443 Salt Lake City, Utah 84122 ***
Visit our Web Page @ <http://www.xmission.com/~cwest>

Date: Thu, 28 May 1998 05:57:12 -0400
From: "Thomas A. Adams" <103360.2133@compuserve.com>
Subject: Grimeton 0915 -0945
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199805280558_MC2-3E65-EBAC@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Greetings, fellow VLF Boatanchor Ops.

Well, it was negative copy here (Wisconsin) on the 0915 GMT Grimeton transmission. Noise levels were just too damned high. A couple of times I thought I heard a morse character coming thru the din, but I'm not sure if I was just hearing ringing in the R-389 audio filter. The CEI 357 was no help here either, and even the much ballyhooed narrow IF of the R-1134 crapped out. Didn't even try the DZ-2; if the heavy artillery couldn't pull SAQ out of the mess, the little aircraft DF set didn't stand a chance. At 0946 I just threw the antenna ground switch and shut down. Now, to grab a bit of shuteye.

We'll try it again at 1500, but I'm not too hopeful; it's just too damned noisy at this location. It sounds like I've got a thunderstorm somewhere near (within 250 miles or so).

73's,

Tom, W9LBB

Message-ID: <356CE1B2.52E84E0B@xmission.com>
Date: Thu, 28 May 1998 04:01:57 +0000
From: Dexter Francis <cwest@xmission.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Black Crinkle
Content-Type: text/plain; charset=us-ascii; x-mac-type="54455854"; x-mac-creator="4D4F5353"
Content-Transfer-Encoding: 7bit

I use Krylon and can control the depth of the crinkle by accelerating the drying time and reducing the thickness of the coats. Remember that the way this stuff works is to skin over and then shrink down as the volatiles evaporate. To get a fine crinkle you need to put thin coats down and have them dry fairly fast. It's definitely an art, regardless.

-- df

*** CWest - P.O. Box 22443 Salt Lake City, Utah 84122 ***
Visit our Web Page @ <http://www.xmission.com/~cwest>

Message-ID: <356CE441.3F40F483@xmission.com>
Date: Thu, 28 May 1998 04:12:52 +0000
From: Dexter Francis <cwest@xmission.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: 5517
Content-Type: text/plain; charset=us-ascii; x-mac-type="54455854"; x-mac-creator="4D4F5353"
Content-Transfer-Encoding: 7bit

I believe that 5517 is a cold cathode rectifier for photoflash units.

-- df

*** CWest - P.O. Box 22443 Salt Lake City, Utah 84122 ***
Visit our Web Page @ <http://www.xmission.com/~cwest>

Message-ID: <356D391B.14718802@bw.webex.net>
Date: Thu, 28 May 1998 06:14:51 -0400
From: Al Klase <skywaves@bw.webex.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: SAQ on VLF Results
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I HEARD THEM! (I think)

Monitored 17.2 KHz from 09:05 UTC. Nothing heard. Reoriented loop antenna from NE to North. (Shoulda set up a rotator. Loop is 100 ft from shack.)

09:28 - Possible CW signal on frequency. Visible on spectrum analyzer (waterfall), audible through DSP box on narrowest bandwidth. Unable to copy through noise, but my code skills leave a lot to be desired. Sounded to me to be 20-25 WPM.

09:36 - three long (2 second?) dashes and a few more characters at speed,
then QRT.

Did anyone else hear them? Can anyone confirm the long dashes?

Set up here is a Watkins-Johnson 357 connected to a 24-turn 40" "Octo Loop" with built-in home-brew broadband preamp powered up the coax. Output of the WJ feeds one channel of a Revox A-77 tape deck, a radio shack DSP unit, and Toshiba lap-top running "Spectrogram". DSP feeds second channel of Revox which drives a headset.

73,

Al

--

Al Klase - N3FRQ

skywaves@bw.webex.net

Flemington, NJ 08822

Web Page: <http://www.webex.net/~skywaves/home.htm>

Date: Thu, 28 May 1998 07:04:51 -0400

From: "Thomas A. Adams" <103360.2133@compuserve.com>

Subject: SAQ 0915 update

To: Old Tube Radios <boatanchors@theporch.com>

Message-ID: <199805280706_MC2-3E66-AC16@compuserve.com>

MIME-Version: 1.0

Content-Transfer-Encoding: 7bit

Content-Type: text/plain; charset=us-ascii

Content-Disposition: inline

Hello, VLF people.

Just took a quick check of NEXRAD weather; if I'd done that first, I'd have probably bagged it for Grimeton and gotten some sleep!

The 0945 GMT RADAR summary out of MPLS / ST. PAUL explained the high noise level quite adequately; less than 100 miles NW of me (southern Wisconsin) there is moderate to heavy rain, with hail! Echo tops were about 4500 - 5500 feet, and the satellite imagery was similarly dismal; it shows a

fairly huge front (no doubt ALL carrying thunderstorms and hail, tho MSP RADAR doesn't show beyond 230 miles) extending well up into Manitoba and Ontario.

This thing isn't gonna be out of radio noise range by 1500 GMT, and looks like it's still growing besides. Time to ground all of the antennas and pack it in; this thing might extend down to the Illinois border in a couple of hours.

Oh well... it's all part of the VLF DXing game. I hope some of you other Grimeton transmission hunters had better luck with the weather than I did.

73's,

Tom, W9LBB

Date: Thu, 28 May 1998 07:11:23 -0400 (EDT)
From: Sandra L Knepper <slkst29+@pitt.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>, owner-boatanchors@theporch.com
Subject: Re: Black wrinkle- help!
Message-ID: <Pine.GS0.3.96L.980528070834.14174A-100000@unixs4.cis.pitt.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Try the wrinkle paint that R and R Designs sells. 1-800-372-4287.
Robert takes the Krylon wrinkle paint and repackages it so that it comes out very much like the Collins Saint James wrinkle.

Dave, W3ST
Publisher of the Collins Journal

Message-ID: <356DF3FA.D30@erols.com>
Date: Thu, 28 May 1998 19:32:10 -0400
From: Michael Hanz <AAFRadio@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Need a Coulomb Calculating Whiz
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill Hawkins wrote:

> Energy is the right thing to look at, but there is that voltage drop problem.
> Perhaps Dave is looking for something to spin up the dynamotors in a fine old
> military transmitter, without having to buy a 75 amp power supply.

I suspect Bill has it pegged, with the added guess that this may be intended to get over the problem of using a small, lightweight switching supply to start up an ART-13 or BC-375 size dynamotor...the parameters sound about right. I know I've often looked longingly at this tiny little 24v 25A HP switcher in the basement, wishing it wouldn't crowbar off so easily. It handles steady state running just fine, thank you - just can't get the dynamotor started.

With those assumptions, the problem becomes one of maintaining the voltage above the crowbar point until the back EMF developed by the dynamotor armature gets high enough to prevent shutdown of the power supply. Wanna solve *that* equation? I have a feeling that it is "only" a simple little partial differential equation involving minor little details like armature moment of inertia, power supply E/I characteristics, load on the generator side of the dynamotor (if any), and a whole slew of other parameters, some of which are most assuredly non-linear...get out the Cray, folks! Since we know so little about the characteristics, I'll just suggest that by far the easiest way to determine the capacitance needed is the old empirical "try it and see" procedure. A scope on the voltage, set up for single sweep, will show you how close you are to achieving success as you keep adding capacitance. It should take only a moment to see whether it's even practical...the capacitance may in fact be in the farad range, but my gut feel is that it will be somewhat less. I realize this approach annoys the engineers among us (I R 1), many of whom like to calculate everything before ordering parts, but sometimes you have to bow to expediency...

73,
Mike Hanz KC4TOS
Herndon, VA
AAFRadio@erols.com

Message-ID: <356D4C49.93ECA215@pixi.com>
Date: Thu, 28 May 1998 01:36:41 -1000
From: Raymond Cote <rcote@pixi.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Mackay Radio model 3010-B
Content-Type: multipart/alternative; boundary="-----"

A9783EF363CA9B3E1A9D5191"

-----A9783EF363CA9B3E1A9D5191
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ane I have a book somewhere. I will look for it soon as I get a chance.
Don't really know when, though. If you have another nibble on a book,
by all means go for it, There are a few of us that have this receiver.
Let me know by e-mail if you get one.
Regards from Honolulu
Ray
Lane C. Zeitler wrote:

> Any info regarding this incredible rcvr would be appreciated. It
> appears it was not designed with SSB reception as the primary mode of
> reception since it has no specific provision for SSB--just a BF0. It
> does work very though in SSB and CW using the BF0. Strange for a mid
> to late 60's rig. I need a manual or copy. Again any info on this rig
> would be a big help. LaneKM3GSan Diego

-----A9783EF363CA9B3E1A9D5191
Content-Type: text/html; charset=us-ascii
Content-Transfer-Encoding: 7bit

<HTML>
<BODY BGCOLOR="#FFFFFF">
ane I have a book somewhere. I will look for it soon as I get a chance.
Don't really know when, though. If you have another nibble on a book,
by all means go for it, There are a few of us that have this receiver.
Let me know by e-mail if you get one.

Regards from Honolulu

Ray

Lane C. Zeitler wrote:
<BLOCKQUOTE TYPE=CITE> Any info
regarding this incredible rcvr would be appreciated. It appears it was
not designed with SSB reception as the primary mode of reception since
it has no specific provision for SSB--just a BF0. It does work very though
in SSB and CW using the BF0. Strange for a mid to late 60's rig. I need
a manual or copy. Again
any info on this rig would be a big help. <FONT
COLOR="#000000">Lane<FONT
SIZE=-1>KM3GSan
Diego</BLOCKQUOTE>

For the testing of transmitting tubes, one source is to look to the tube rebuilders; this especially applies to ceramic types. They *have* to test before they ship, since they've had the thing opened up, have fiddled with it, and have dumped the original vacuum out on the floor.

Econco in California (I think it's CA--out west somewhere) and Freeland in Louisiana are two of the better-known ones, though it has been many years since I used Econco and at least a couple since I spoke to anyone at Freeland. (They're pretty cool--started up right after WW II and at one time, rebuilt the bigger glass tubes, too. Don't know if they still do).

Awhile back, someone else posted the name of a fellow who specializes in testing transmitting tubes to this list or Glowbugs--I can't seem to find it and hope the original poster is still out there.

Static and dynamic testing of such tubes is not terribly difficult if you have gear that uses 'em and a spare supply to use for applying grid bias for the static tests--just compare readings to a known good tube. It does take time, well-protected power supplies (just in case!) and a lot of slow tweaking and reading meters; but the tube manuals cover how to do this sort of thing very well. (And that was one advantage of the big ol' Class A/AB1 amps in old TV transmitters; we "tested" new tubes by puttin' 'em in the transmitter and bringing it up with no drive applied. *Everything* was metered; you'd tweak grid voltages for the proper "resting" plate current and compare how they ended up with what was typical for the rig. Of course, this only worked for the two power tube types the rig used, but those were all we cared about!)

73,
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

Message-ID: <356D668C.A7CB3508@swbell.net>
Date: Thu, 28 May 1998 08:28:45 -0500
From: Lenox Carruth <carruth@swbell.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Black wrinkle- help!
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

That's a tough call, Cris. I would only suggest stripping and repainting if you could get wrinkle paint in the original color and I know of no place to get it today. I think that I would try VERY CAREFULLY painting a little

Naval Jelly on the rust spots. Let it work for 15 minutes or so. You might stir it around with a pointed instrument. Then rinse it off with water and do it again until the rust is gone. Do what you can to pick the rust off with the pointed instrument. I cleaned a WW-II machete with the stuff and it came out like new. Took about ten application cycles, though. You have to have patience.

You can spray a little wrinkle paint in a paper cup and put it on just the spot. Again, this is something you need to practice. It can come out good but rarely excellent. Spray a wrinkle finish on a test piece of metal, scrape some dime sized areas off after it dries and then practice the repair procedure. You will then have to touch up the black wrinkle with the proper shade of OD. You can mix it with Testor's model paints or you can buy a spray can from Northwest Paint and Supplies (360) 632-5242. They won't take credit card orders over the phone but I think you can fax them. Color number for WW-II OD radios is 80013.

The problem with that procedure is that Naval Jelly will remove paint quicker than it will remove rust so you have to be very careful where you put it. I have not tried this so you might want to test on something that is already trashed.

Good luck. Let me know how it turns out.

Cris Calhoun wrote:

> Lenox, what do you recommend for fixing minor rust spots on a wrinkle
> finish?
>
> My BC1000, which has WWII OD wrinkle finish, has several dime-sized rust
> spots. Should I strip it all and repaint, or just try to clean and
> patch the spots?

--

Lenox

Lenox Carruth, Jr. carruth@swbell.net Dallas,
Texas
Collector of WW-II Communications Equipment and Memorabilia

Wanted: TCS-14 Transmitter, TBX, BD-71, Sextant

Message-ID: <001601bd8a3f\$1edb4060\$4fa10b9e@mils179.monmouth.army.mil>
From: "Mike Feher" <n4fs@monmouth.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <n4fs@monmouth.com>
Subject: Re: Need a Coulomb Calculating Whiz
Date: Thu, 28 May 1998 09:47:08 -0400
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Just do not forget that the capacitors have to get charged somehow also. I doubt that a switching supply could even charge a couple of farads. Of course one could take more time for the charging process and then it could work. Not counting efficiencies, before you get all that energy out, you got to put it in. This is fun to talk about but has no bearing on reality, HI.

Mike Feher, N4FS
89 Arnold Blvd.
Howell, NJ, 07731
732-901-9193

>

Date: Thu, 28 May 1998 08:58:21 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Need a Coulomb Calculating Whiz
Message-ID: <Pine.SUN.3.96.980528082922.2704C-100000@indy3>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi!

Everyone has speculated about just what it might be that Dave's got to deliver amps to--something involving rotary power conversion for the purposes of The Uniformed Services being the most likely. And most of us have thunk that storage batteries might do a better job of it than big condensers.

Well, it's true. But lead-acid cells are *not* good things to have in one's hamshack, especially if it's a nice shack, or there are mitigating

factors like an open flame (an old gas furnace with pilot, for instance) or small children who visit frequently. (Or mice that steal bits of copper wire, a thing that haunts my worst nightmares about the 50V/300A supplies in the rig at work).

...What about gel cells? They're a little better-behaved (you'll find 'em in the battery-backed-up EXIT signs in all the nicer places!) and can sometimes be found used at reasonable prices. The question is, how are they on "cranking amps," short-term high-current demand? This is not a typical load for gel cells; they might **really** hate it.

Another option, if the gear's got a little "headroom," (tolerance of supply voltages on the order of 10% high) might be to use some **very** high-current diodes (talk to the mechanics at a garage specializing in automotive electric work) to bring in a very high-current but ugly supply (a surplus battery charger or whatever). The big supply can have all sorts of hum and trash; you set it a couple volts higher than the low-current "running" supply, and hang a pair of big diodes, one from each supply to the DC input of the equipment. Start-up sequence is, you bring both supplies up; the big one spins the dynos up, gets the tube heaters percolating, and after some fixed delay (oh, let's say 1.5 seconds, a number that just dropped out of the sky), you turn it off. The nice clean "running" supply takes the load, and everything's happy.

There are other ways to go--the trick is to either, as Dave's original implied, turn low current over a long time into high current over a short time (storage batteries, condensers, a car generator with a rope around the pulley that runs up to another pulley at the peak of the barn roof and has a heavy weight on the end [don't snicker, it would work though regulation would be a problem!]), or to find some other way to get a lot of amps over a short time and hand off gracefully to a low-current supply. Stated that way, it's a little easier to do some thinking outside the box. This is really Greek engineering in the manner of Archimedes (more accurately, Hellenistic engineering but I slept through Classical History, okay?): all the problem is after is a long enough lever and a place to stand.

73,
--Bobbi

** That one cheats on the input parameters, since it turns honest sweat over a long time into high current over a short time unless you use a geared-down electric motor to haul the weight up! But it's the most direct and basic image of the actual problem. Charging up a condenser or storage cell is **exactly** like hoisting up a heavy weight and having that "work" handy to use when needed. (And the leaking off of charge over time is the sloppy knot you tied in the rope--tch, tch).*

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore

FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

Message-Id: <v03102800b1931b182b3d@[134.53.4.141]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Thu, 28 May 1998 09:05:56 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: Black wrinkle- help!

>> My BC1000, which has WWII OD wrinkle finish, has several dime-sized rust
>> spots. Should I strip it all and repaint, or just try to clean and
>> patch the spots?

>
>Lenox
>

Hi Lenox,

I bought a little gadget at a Wal-Mart called a "spot sander." It resembles an automatic pencil, with an eraser-sized sheaf of stiff fiberglass fibers sticking out one end. An adjustment knob on the other end controls the length of the fibers protruding from the end. It is a very effective tool for scraping away the rust on a paint chipped cabinet. It costs a couple of bucks.

73,

Jim Garland W8ZR

From: "Don Buska" <d.buska@aaiate.com>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 28 May 1998 09:58:29 -0500
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit
Subject: Thanks to all for AWA Review #1
Message-Id: <98May28.090846cdt.33154@gateway.aaiate.com>

Just a short note folks. The response was overwhelming to my request for the James Millen information from AWA Review #1. A big thank you to all who offered copies. A special TNX to Garey K40AH who had a copy in my hands via fax just a few hours after the request was made!

It is surely a joy belonging to this kind and dedicated BA community.

73

Don N900

From: arc5@ix.netcom.com
Date: Thu, 28 May 1998 09:15:48 -0500 (CDT)
To: Old Tube Radios <boatanchors@theporch.com>
Message-Id: <19985299171866334@>
Subject: Patching Wrinkle Paint
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; name=""

I have had some limited success patching wrinkle paint.
The method needs improvement and I present it here
in hopes someone with more time then I can work with
it and report results.

1. Get a can of good primer and a can of wrinkle paint.
Shake extra-well to mix thoroughly.
2. Go outside and hold the can downwind from you
and anything else you don't want covered with
little specks of paint.
3. Hold the can upside down. Press the spray buttons
until almost all the pressure is gone. This will
release most of the propellant without wasting
much of the paint. What you're looking for is
just enough pressure to get the paint to dribble
out into an external cup or holder. Usually enough
of the propellant is dissolved in the paint to put
it under a small amount of pressure all the time.
4. Clean the area you want to patch, removing all crud
and loose paint from around it.
5. Use a good-quality brush to apply a coat or two of primer.
Don't use junk brushes unless you want hairs in the paint.
Allow to dry properly or your finish will be trashed.
I cure it with a little heat from a heat lamp.
6. The only thing that will get this step "right" is practice.
Brush-on a liberal coating of the wrinkle paint. Gently
heat with a heat lamp or hot air gun until it skins over

Gently brush-on another coat, being careful not to "ball-up" the previous coat. Heat evenly with the heat source. If it smokes alot or boils, you got it too hot and you'll have to start over. Be patient. It will start to wrinkle in one or two areas, then spread. once it finishes wrinkling, set it aside for at least 24 hours.

7. The new wrinkle will be "shineier" then the old. A coating of what ever paint protecting product you believe in, like lemon oil or Scott's Liquid Gold, will even the finish. It will never be "exactly" matched, but it will look good on display.

If you have round or irregular "spots" where the paint didn't wrinkle, you either didn't coat it evenly or the finish wasn't cleaned properly.

If you have a very fine wrinkle, such as on some "ARC-5" sets, a single coat of wrinkle paint properly heated will match pretty close.

Suggestions and improvement solicited.

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

From: MNHopkins@aol.com
Message-ID: <9998f052.356d74c8@aol.com>
Date: Thu, 28 May 1998 10:29:27 EDT
To: Old Tube Radios <boatanchors@theporch.com>
Cc: glowbugs@piobaire.mines.uidaho.edu
Mime-Version: 1.0
Subject: Regen. S'het articles annotated.
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Now that we are veering away from QRMing bloopers to real readios, i.e. Regenerative Superhets, I thought it worthwile to formally cite and review some articles lately mentioned,

"Beginners' Superhet for 80, 40 and 20," Middleton, A. (W1CA), CQ, Dec. 1948 p 26

This is an attempt to build a "one dial" controllable RX using fixed regeneration in an IF around 1700kc. No modification to the IF can is necessary as he uses a choke in the cathode of the 6SH7 IF tube and varies the gain with a pot on the screen. Like later ARRL novice projects, one just sets up at the threshold of regeneration and leaves it. Construction plans are quite detailed and the big old Octals, 6SB7Y, 6SJ7, 6J5, 6J6, are a joy to wire. An off board p/s is called for but not described except by reference,

but any 270/6.3 would do. In short: most could get one of these going.

"Super-Gainer CW Receiver," Jones, F (W6AJF), CQ Anthology 1952-59, Cowen, 1961 p 129 (also CQ, late 1957, Nov.?)

This is the last of the line. Frank Jones is up to a 6AB4 RF amp/TR , a 12AT7 oscillator /mixer, a 6BJ6 IF and a 12AX7 detector feeding a 6AU6 cause a pal had to have speaker volume. "Relatively poor performance on phone reception" is promised of the around 455 IF and xtal filter. In a sense this rig, with TWO IF cans and a xtal filter is not a Regenerative Superhet, but I am inclined to follow wherever Frank leads.

"Stabalized Regenerative Detector," Smith, W.(W2BRQ) CQ, 1964, Nov. p 80

Author claims 30 years experience with this scheme which I do not fully understand. A diode and second pot control regeneration so as to make it unaffected by received signal strength. He shows how to use the scheme at the mixer, IF or 2d detector. He uses a 6AU6 and, like reading Farakan, the more I study it, in spite of myself, the more sense it makes. I am making several copies to send to part of the army of folks smarter than me in all this.

Finally, most of us know Bob Dennison:

"The Dennison 3-Tube Superhet," Dennison, B. (W2HBE), Electric Radio 1997?, Month? p 26 -- hope someone can supply a correct citation.

This article restates Frank Jones via Bill Orr and goes on to build a 2-6U8, 6AK6 rig for 80, 40 and 20. With no plug-in coils, an on-board p/s and speaker, it does not look like a 'Super Gainer' but the family resemblance is strong and this one might be the easiest of all of them to build.

PHOTOCOPIES: Since it is unfair to mention things without making them available, I send most article copies for \$1 and an SASE. The SASE is to get the address right and the \$1 attempts to cover all costs, not just the 10 cents/page. I am blessed with the complete CQ back to issue 1 from the estate of VHF pioneer Leroy May, W5HN, W5AJG, 6M WAS No.4, SK, who was a contemporary of Frank Jones'. I also have spotty coverage and resources filing a 4-drawer cabinet and several bookcases.

73 de ab5L, michael in dallas, student of Tecraft and International (ICM) ham products and mementoes of Six Meters' Golden Age: 1957-58

Michael Hopkins

Box 226841

Dallas, TX 75222 MNHopkins@AOL.com

End of BOATANCHORS Digest 2071

>From ???@??? Fri May 29 04:23:06 1998
Message-Id: <199805290426.XAA02395@sco.theporch.com>
Date: Thu, 28 May 1998 23:25:40 CDT
Subject: BOATANCHORS digest 2072

BOATANCHORS Digest 2072

Topics covered in this issue include:

- 1) Re: Need a Coulomb Calculating Whiz
by kd5byb@wt.net
- 2) Re: Who Tests Xmtg Tubes???
by Ken Lopez <kjlopez@earthlink.net>
- 3) ADMINISTRIVIA: Posting Admin Requests
by listown@jackatak.theporch.com (Mail List Owner)
- 4) SAQ Heard in NJ at 15:00
by Al Klase <skywaves@bw.webex.net>
- 5) CATHODIC TRIVIA WINNERS
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
- 6) Grimeton adventure
by Nick England <nick@cs.unc.edu>
- 7) Re: beware of ac plug
by dma@islandnet.com
- 8) RE: Bristol Wrench source
by dma@islandnet.com
- 9) Re: foam-in-place packaging
by dma@islandnet.com
- 10) Re: Grimeton adventure-and good friends
by john <johnmb@mindspring.com>
- 11) Re: Signal generators - McMurdo Silver
by Richard Post <post@ouvaxa.cats.ohiou.edu>
- 12) Re: need capacitors
by Sandy W5TVW <ebjr@worldnet.att.net>
- 13) Halicrafters HT-9 colis needed
by John Dilks <oldradio@worldnet.att.net>
- 14) Re: foam-in-place packaging
by Bruce Muscolino <w6toy@erols.com>
- 15) [Fwd: Raytheon]
by "Lloyd A. Scott, Jr." <wpul1130@concentric.net>
- 16) Product detector articles
by hikrbikr@erols.com
- 17) Need SX-42 structural piece
by hikrbikr@erols.com

- 18) Hallicrafters knob
by hikrbikr@erols.com
- 19) Re: need capacitors
by Steve Lords <sklords@sprynet.com>
- 20) Re: Grimeton adventure
by "Lawrence R. Ware" <lrware@pipeline.com>
- 21) Re: need capacitors
by "Arden Allen" <gumbear@pacbell.net>
- 22) Nomenclature: Wrinkle, Crinkle, Crackle, Crystal, etc.
by "Barry L. Ornitz" <ornitz@dpnet.net>
- 23) Re: need capacitors
by Henry van Cleef <vancleef@netcom.com>
- 24) Collins 75S3 Available
by NBroline@aol.com

From: kd5byb@wt.net
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 28 May 98 10:19:23 +500
Subject: Re: Need a Coulomb Calculating Whiz
Message-id: <356d807b.3516.0@wt.net>

> ...What about gel cells? They're a little better-behaved (you'll find
>'em in the battery-backed-up EXIT signs in all the nicer places!) and can
>sometimes be found used at reasonable prices. The question is, how are
>they on "cranking amps," short-term high-current demand? This is not
>a typical load for gel cells; they might **really** hate it.

When I was in college, my senior design project was a 144 volt, 400 amp
electrical system for a Hybrid Electric Vehicle project. Since
we were on a shoestring budget, our battery pack was 24 sealed
lead acid batteries (CFMP series) that were donated by the Eagle-Pitcher company.

According to the engineers at Eagle-Pitcher, while sealed lead acid
batteries aren't the ideal high charge rate / high discharge rate
battery, they will work in these applications - but the lifetime
will be shortened. If I remember the numbers correctly, Eagle-Pitcher
spec'ed their gel-cells to do 2000 cycles when charged at the trickle
charge rate, but if you charged them at the fast charge rate, you
could expect a reduced lifetime - 500 cycles if I remember correctly.
Discharge wasn't as big of a factor. Yes, they get hot when
discharged quickly, but according to EP, gel-cells get more
efficient when they are warm. (not sure if I really beleive
this, but it was what I was told)
That set of batteries had no problem supplying power to our
30 HP motor...

So if you treat them right, and don't fast charge them, gel-cells should work okay, but may have reduced life.

73 y'all,

Ben

kd5byb@wt.net

Benjamin D. Hall, KD5BYB

e-mail: KD5BYB@WT.NET

Message-ID: <356D8879.5C30@earthlink.net>

Date: Wed, 27 May 1998 21:31:58 -0700

From: Ken Lopez <kjllopez@earthlink.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

CC: Old Tube Radios <boatanchors@theporch.com>

Subject: Re: Who Tests Xmtg Tubes???

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

try Mike Foreman in Oakland Calif. He advertises in most of the Mags.

Cheers,

Ken, N6TZV

Message-Id: <199805281615.LAA29804@jackatak.theporch.com>

From: listown@jackatak.theporch.com (Mail List Owner)

To: Old Tube Radios <boatanchors@theporch.com>

Subject: ADMINISTTRIVIA: Posting Admin Requests

Date: Thu, 28 May 98 11:15:00 CDT

Gang-

Please accept this periodic posting as it is intended:

A suggestion that will help everyone on the list...

If there is a problem with your email, i.e., the list suddenly stops coming to you, or if you have problems with someone else's mail, PLEASE address any questions to, and seek help from:

listown@jackatak.theporch.com

There is really no one on the list who can help you with a problem, and if I don't happen to see your post, nothing will happen, except you may irritate the other list members... needlessly.

This is *especially* true of the "XXXX YYYY your mail is bouncing, please send me a good address"

If your mail to this person is bouncing, in all likelihood, either you have the address a bit wrong, or s/he isn't receiving mail from ANYWHERE *especially* not from the list, which is delivered as "Bulk!"

Treat the list as a symposium.

In such an environment, with many folks attending who have paid to be here, it is unlikely you would take up the symposium's resources to solve an individual problem with your seating...

So, if you encounter a problem, PLEASE remember to send your questions to me, the one person who can help, at:

listown@jackatak.theporch.com

Thanks for your attention

--

73

Jack, W4KH/Mobile - - - BoatAnchor Mailing List Owner - - -

listown@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"

"Il n'y a que les idiots qui ne changent jamais d'idee"

Thu May 28 11:15:00 CDT 1998

Message-ID: <356D8DE9.D52CDAF4@bw.webex.net>

Date: Thu, 28 May 1998 12:16:41 -0400

From: Al Klase <skywaves@bw.webex.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

CC: "'ALanger394@aol.com'" <ALanger394@aol.com>,

"'Dave Stinson'" <arc5@ix.netcom.com>, "'Gary Chatters'" <gc@cen.com>,

"'John Reed KA5QEP'" <jtreed@poncacity.net>,

"'Mark Pilant'" <pilant@seesaw.ENET.dec.com>,

"'Paul N1ZRR'" <afpgreg@state.me.us>, "'Roth, Duie'" <roth@onr.com>

Subject: SAQ Heard in NJ at 15:00

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Heard the Alexanderson alternator on 17.2KC from about 15:00 to 15:30. Very rough copy! My CW skills are quite poor. I have managed to extract "SAQ SAQ dit-ditty-dah-dit-dah" from the end of the audio tape. I have some short bits that I caught digitally that are more readable. I'll work these over and post a sample as a wave file. (I'm still learning the tools!)

CUL,
Al

Broline, Nick (MsMail) wrote:

>
> The three Austin stations hear nothing for SAQ. We were all capable of
> operating well below the noise level, and the noise level was very low
> this morning. For my location the power line harmonics were very
> evident, but not oppressive.
>
> Al, for your benefit, it was my assumption that the transmission was to
> be a prepared text announcing the award to the museum (a press
> release?). I also understand that it was to be at a 12 wpm rate. It
> might be constructive to get a description of what actually took place
> from the horses mouth. Can you help there, Duie?? The home page showed
> no change this morning.
>
> I suspect that the signals you heard and saw were artifacts from
> something else, or perhaps the signal being broken up by the noise
> bursts so as to appear to be shortened symbols than they were.
>
> 73
> Nick W5FUA

--
Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ 08822
Web Page: <http://www.webex.net/~skywaves/home.htm>

MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
Date: Thu, 28 May 1998 13:29:25 -0400 (EDT)
Subject: CATHODIC TRIVIA WINNERS
To: Old Tube Radios <boatanchors@theporch.com>
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
Message-ID: <9805281329.aa20682@pcusa01.ecunet.org>

To the following stump-the-chumps (with apologies to Car Talk &
this august group) question:

> Subject: RE: CATHODIC TRIVIA
>
> Ok, all you filamentarian trivia phreaks, what's a:
>
> 1) monoscope

- > 2) phasmajector
- > 3) monotron

Three winners weighed in, Tom Norris, Mike Sewell and Andrew Emmerson (no surprise, 405 Alive!).

What a good crowd! Thanks!

-John Sehring (written on Thu, May 28, 1998 at Custer, SD) UCC WB2EQG

From: Nick England <nick@cs.unc.edu>
Date: Thu, 28 May 1998 13:42:27 -0400 (EDT)
Message-Id: <199805281742.NAA18206@altair.cs.unc.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Grimeton adventure
Cc: tell@cs.unc.edu

Unecumbered by either practical experience or theoretical knowledge of VLF reception, three of us (John Poulton KF4OZY, Steve Tell ex-WA2??, and yrs truly) sprang into action today.

Remember when you were a kid and free of all that intellectual baggage that haunts you today ? Remember back when imagination could overwhelm piddling constraints like Ohm's Law and Maxwell's Equations ? Now you know how we approached this exercise.

Chapter 1 The Seed is Planted

Let's blame it on Larry Ware. Why not ? Last fall at the Shelby hamfest we're shooting the bull and I ask about the HP Wave Analyzer I saw under a table. "Yeah," sez Mr. Ware, "it's like a frequency selective voltmeter - I've got several and have even used it as a VLF receiver." So \$25 later I've got an HP Wave Analyzer.

Chapter 2 Fertilizer falls on Said Seed

Someone posts info about the Grimeton Alexandersson generator transmission on the BA list. AHA! says a little voice - maybe that Wave Analyzer thingie will pick it up.

Chapter 3 Things begin to Fall Into Place

The little voice whispers some more - "you're gonna need an antenna". So figuring this stuff is VLF and knowing that means Big Antennas, my thoughts naturally turn to my good buddy, John KF4OZY, who just happens to have a Big Horse Pasture adjacent to his house. "Hey JP, is that a wooden fence around your horse pasture?" "Yup", quoth he. "So whaddya think about using it to support a largish loop antenna and trying to hear the Swedish rotating machinery?" "Kool!" sayeth he.

A little trip to the lab turns up a couple of 1500' rolls of govt. surplus twisted pair. Hmmm - that means we can make a 2-turn loop !! Hey, bigger is bound to be better, right ?

Chapter 4 Planning for the Big Day

So Memorial Day Holiday, while John is in my basement disassembling 2 (two) 32V-2 transmitters (that's another story), I plug in the \$25 Wave Analyzer to see what happens. A few squirts of dioxit and a few feet of wire hooked up to the Wave Analyzer and I'm hearing lightning crashes, the horizontal oscillator on my computer monitor (30kc), and an audio signal generator tuned to 17.2 kc. Now we're cooking ! Oh yeah, by now I am having to consciously disregard any actual information that is showing up on the e-mail lists. Hey - Blind Faith is gonna carry us through this episode.

Chapter 5 The Sacred Antenna

Hey, I've heard that Beverage antennas are good for LF reception, let's see what the Antenna Scrolls have to say. Several antenna books later, I've kinda decided that multiple wavelengths at 17.2 kc is going to present some challenge. OK - the original plan is to make a big loop around the pasture (roughly square and 500' per side) by hanging the wire on the wooden fence posts. So what if that's only 4' off the ground - getting an antenna up any fraction of a wavelength would take a flotilla of Goodyear blimps. Besides JP got the job done just fine by trudging around the perimeter of the pasture.

Chapter 6 The Big Day

I've loaded the Wave Analyzer thingie and a scope into the car. Added a Heathkit tube amplifier (of course!) and a speaker and we're ready to rock and roll. About 1430Z I arrive at JP's horse pasture to find JP and co-worker Steve (who has been shanghaied into this adventure). Oh yeah, we skipped the 0900Z attempt - we figure we may be crazy enough to try this stunt, but we aren't crazy enough to get up early to try this stunt.

Chapter 7 The Results

Plug in the Analyzer, warm up the amp, and connect said Antenna to said Analyzer. WHOA! All kinds of noise - this is a Good Sign. Find WWVB at 60 kc OK. Find a really strong signal at 24 kHz that sounds like FSK. Hook up a frequency counter and set the gear up for 17.2 kc. Lots of noise. 1500Z comes and goes. No change in the character of the noise. We twist all the knobs on the Analyzer thingie. Nada.

Ah well - we had a ton of cheap fun. JP says - "So when are they gonna fire up that Alexandersson generator again ? What if we built a shielded loop ? What kind of receiver do we really need ? " The Hook is Set - We'll be Back !!

Chapter 8 Epilogue

We reel up all the wire and pack away the gear. But as I'm leaving, John is showing Steve one of his spare R-390A's and it appears as though Steverino is about to acquire his First Boatanchor. Boatanchoritis has claimed another victim.

What a great hobby !
73 to all,
Nick KD4CPL

From: dma@islandnet.com
Message-Id: <Version.32.19980528083551.00ff17d0@mail.islandnet.com>
Date: Thu, 28 May 1998 08:46:16 -0700
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: beware of ac plug
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:39 PM 5/24/98 -0600, wa7isl wrote:
>just started going thru another old "BA"
>this one had the plug changed over to a 3 prong type.
>ohmed it out and found out the ground
>wasnt hooked up and the power switch was
>turning the neutral on and off and leaving the hot on.

In many old radios where the power switch is part of the volume control it will be wired so that the switch has the lowest possible ac voltage (referred to signal ground) on it. Minimizes hum. Before polarized plugs, this often meant that the side of the line (which could be hot or not) that was connected to ground (shudder) was the switched side. For polarized plugs, it was the neutral.

So the line voltage (in an ac/dc radio) could be present on the filament chain even with the switch off.

Moral: don't assume "power" is off just because the switch is!

Cheers all

Jan Skirrow, VE7DJX
Duncan, BC, Canada

From: dma@islandnet.com
Message-Id: <Version.32.19980528085019.01025e60@mail.islandnet.com>
Date: Thu, 28 May 1998 08:57:18 -0700

To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Bristol Wrench source
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 03:06 PM 5/26/98 -0400, John Poulton wrote:

>Just a reminder that Fry's also has the Xcelite set at about \$38. Not
>cheap, but a very nice set. Got mine at the Fry's in Burbank, CA, but it's
>likely that the Bay-area stores have the set, too. The set number is
>99PS-60, and you could probably place a phone order to one of the stores.
>
>Good hunting!
>John Poulton KF4OZY

I have a small supply of good quality "L" bristol wrenches. The only size I have is the one that fits the knobs on the R-390A. It also fits the RF slugs on most (but not all) R-390As. This version has a long side (3") which makes them much more usable then the usual short sided version (which also seem to break fairly easily).

I have the Xcelite set as well, but find I use the "L" key for almost everything.

For \$3US, I'll air mail one to anyone who wants one. I have several spares, but can get more if the demand is there.

Jan Skirrow, VE7DJX

Duncan, BC, Canada

From: dma@islandnet.com
Message-Id: <m0yf6mA-000KuPC@mail.islandnet.com>
Date: Thu, 28 May 1998 09:08:35 -0700
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: foam-in-place packaging
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 01:50 PM 5/27/98 -0500, Bill Hawkins wrote:

>People on this list have praised foam-in-place packaging for shipping
>boatanchors.

>Can someone tell me more about foam-in-place? Did I really hear that
>UPS offers it at some customer counters? Know of one near the south
>side of Minneapolis?

Everything I've bought from Tucker has been shipped this way. Also, W.J.

Ford started using it a few months ago, even for shipping small batches of tubes. So it's pretty common stuff and not very expensive. No double boxing is needed, so you save there. Even the post office can't destroy it.

I'd talk to someone in your area that's in the business of supplying shippers. They almost certainly can help out. Some of the independent shippers that are local UPS drop points also have it available.

One warning, however. Make absolutely sure the unit is inside a plastic bag that is well sealed before you foam it. I got one piece of gear where the bag had a tear in it, and I've never had so much trouble getting something off a BA!!!

Jan Skirrow, VE7DJX
Duncan, BC, Canada

Message-Id: <199805281808.0AA01206@camel7.mindspring.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Thu, 28 May 1998 14:06:42 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@mindspring.com>
Subject: Re: Grimeton adventure-and good friends

At 01:42 PM 5/28/98 -0400, KD4CPL wrote:

>
>Unecumbered by either practical experience or theoretical knowledge
>of VLF reception, three of us (John Poulton KF4OZY, Steve Tell ex-WA2??,
>and yrs truly) sprang into action today.

What needs to be added to this story, is that JP and Nick helped me unload about 6,000 lbs of electronics junk (most of which was contained in a single rack cabinet, it seemed!) that some pinheaded lunatic (me) convinced JP to transport cross country in a rented truck just days before their Grimeton field day. While this worked out so that every rusty transformer I own now is worth about \$93 apiece, it did provide some entertainment and exercise for us at the unloading end, it was also a good excuse for the gang to get together and inhale pizza at the local emporium. I now have enough BA junk to paw through to keep me busy for months (or at least until the Winston Salem fest).

I'm happy to report that all gear was delivered safely, and nothing was damaged (except for the handtruck I borrowed which upon post mortem exam seems to have collapsed under the weight of the Big Blue Rack).

That John and Nick had enough stamina left to hoist Larry's LF "receiver" is tribute to their recuperative powers and general enjoyment of this BA hobby. It is fun with good friends around!

73
/John

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+-----+
|Wanted:      Howard Co. receiver/acc'ys/docs   |
|              AWA-OTB back issues...          |
|              JW Millen exciter                |
+-----+
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Message-Id: <v03007804b1935771d75c@[132.235.47.54]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Thu, 28 May 1998 18:47:53 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Richard Post <post@ouvaxa.cats.ohiou.edu>
Subject: Re: Signal generators - McMurdo Silver
```

>Hi gang:
>Before the Sig.Gen thread dissolves, I found a McMurdo Silver Model 906
>sig.gen. a few months ago. Finally got the case off, and was pleasantly
>surprised. This aint no Heathkit (God rest their chassis). Oscillator in a
>very shielded copper box. 6 tubes that I can see, a light bulb so the
>electrons can see their way around, meter, nice dial, knobs, etc. Looks in
>reasonable condx, but the caps look like they wanna be changed.
>Anyone have a schematic that I can beg, borrow, steal, copy, buy, etc.?
>Gotta fix the test equipment before I can test the equipment.
>73, Ralph, VE7XF

The McMurdo-Silver Model 906 was also featured as an article in Radio News (with schematic). I believe the article was written by none other than McMurdo Silver himself. Silver was mixed up somehow with Halligan, Sears Roebuck, Wards, and others in the early to mid 1930s producing communications receivers. He later produced his own line of expensive receivers for the home.

I bought a 906 signal generator at a hamfest that looked fairly normal on the outside but someone had completely converted it to sand state. The seller simply said it worked. He was right to some extent but not overly honest.

McMurdo-Silver had a series of test equipment in this small form factor in the late 40s, early 50s. I believe each was written up by Silver in Radio News complete with schematic. I have the 904 resistor-capcitor bridge, the 905 Sparx signal tracer, and had (but sold) the 909 sweep generator. A "vomax" (VTVM) was also one of the series.

Rich

```
=====
      Boatanchor Pix website - KB8TAD
      http://ouvaxa.cats.ohiou.edu/~post/PIX/BA.html
```

```
visit the Museum of Radio and Technology website
      http://ouvaxa.cats.ohiou.edu/~post/MRT/
      mailto:rpost1@ohiou.edu
=====
```

```
-----
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: Re: need capacitors
Message-Id: <19980529000543.MSKU24685@LOCALNAME>
Date: Fri, 29 May 1998 00:05:43 +0000
```

```
At 05:13 PM 5/24/98 -0600, you wrote:
>looking for the following electrolytic caps
>for recaping a globe scout 680
>2 ea 12 mfd @ 700 vdc
>checked AES's on line catalog and no luck
>thanks
>steve
>wa7isl :-)
STEVE,
```

I don't think you will find any of those anymore! I would use two 25 uf @ 350-450wv in series for each 12 @ 700 in the rig. Bridge them with 220K to 470K 1-2 watt resistors to equalize the voltage across each. That should work just fine.

73,
Sandy W5TVW

```
-----
Message-ID: <356E005A.918@worldnet.att.net>
Date: Thu, 28 May 1998 20:24:58 -0400
From: John Dilks <oldradio@worldnet.att.net>
```

MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Halicrafters HT-9 coils needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

To all,

I need some (a set) of coils for a HT-9. Also needed is a bottom cover and feet. I would appreciate any leads.

73' John Dilks, K2TQN

Webmaster for the Antique Wireless Association
<http://www.ggw.org/awa> Click on "Page 2"
--and--
for the New Jersey Antique Radio Club
<http://www.eht.com/oldradio>
-----please-visit-----

Date: Thu, 28 May 1998 20:32:37 -0400 (EDT)
Message-Id: <2.2.16.19980528202414.2107f646@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Bruce Muscolino <w6toy@erols.com>
Subject: Re: foam-in-place packaging

Back in 1978 I accepted an assignment to live and work in The Netherlands. I obtained a Dutch reciprocal license (PA3AIC) and asked my employer to ship seven boxes of ham gear to my new office. It was all shipped "foamed in place" and it all arrived safely. In fact I saved the boxes and used them to return the gear when I came home.

Seems to me the method they used was to spray some expanding polyurethane foam into the bottom of the box to get a base. then they wrapped the unit in a heavy duty plastic sheet and placed that on top of the base. they foamed again around the unit until they were up to the top. Then another piece of plastic sheeting was laid over the unit and foam walls and more foam added to make a top. The box was then sealed and shipped.

It seems to me that places like McMaster-Carr sell expanding foam. Combine that with a box and some plastic sheet and you have the basis for an experiment! McMaster-Carr is an industrial size industrial supply company that sells everything from brooms to sweep the floors to flooring material so you can have floors to sweep! No affiliation -- just a long time satisfied customer.

No guarantees, and be sure you seal the plastic sheet around the unit very well as expanding foam is good at getting into crevices. BTW, I also seem to remember that the foam stuff wasn't too expensive, but my McM catalog is at work and i'm not, right now!

73

Message-ID: <356E1222.506FA675@concentric.net>
Date: Thu, 28 May 1998 18:40:50 -0700
From: "Lloyd A. Scott, Jr." <wpul11130@concentric.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: [Fwd: Raytheon]
Content-Type: multipart/mixed; boundary="-----1460581715DC143AED9110DF"

This is a multi-part message in MIME format.

-----1460581715DC143AED9110DF
Content-Type: text/plain; charset=us-ascii
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

-----1460581715DC143AED9110DF
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Message-ID: <356E1175.7C199D4F@concentric.net>
Date: Thu, 28 May 1998 18:37:57 -0700
From: "Lloyd A. Scott, Jr." <wpul11130@concentric.net>
X-Mailer: Mozilla 4.01 [en] (Win95; U)
MIME-Version: 1.0
To: boatanchors@theproch.com
Subject: Raytheon
X-Priority: 3 (Normal)
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Greetings All: Just returned form vacation in Georgia, where I picked up a Raytheon RC-11 Audio Console for a Radio Station. I am in need of a manual, three knobs, one lever key and 4 lever key knobs. I have not compaired the knobs, however I

think that the RCA BC-XX Series or 76 series console knobs will work. If any one can help, please contact me. Many thanks in advance and 73's
Lloyd

-----1460581715DC143AED9110DF--

From: hikrbikr@erols.com
Message-ID: <356DA467.5192@erols.com>
Date: Thu, 28 May 1998 18:52:39 +0100
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Boatanchors <boatanchors@theporch.com>
Subject: Product detector articles
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Al... Saw your 24 May post on Boatanchors concerning product detector articles by W3JHR and W2AEF.

"The original "The Single Tube Product Detector" article by Paul Lee, W3JHR, was in Apr. '61 CQ, shows replacing the 6BA6 with a 6BE6. Req'd no socket change, just wiring. A later short comment section by Wilfred Scherer, W2AEF, is in an article entitled "More on Updated Improvements for the 51J series Receivers, Dec. '68 CQ. Lee also had an article on improvements in Apr. '68 CQ.

There was another article by Scherer in his Q and A column in the September 1970 CQ, pp. 77-79, on retrofitting product detectors in older receivers using both pentode and triode BFOs. I'm thinking of trying it in an NC-2-40CS I'm rebuilding and perhaps an NC-183D.

73,
Mike Steussy AE4R
Vienna VA

From: hikrbikr@erols.com
Message-ID: <356DCE3B.1411@erols.com>
Date: Thu, 28 May 1998 21:51:08 +0100
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Need SX-42 structural piece
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ahoy! I'm working on my SX-42 and making excellent progress. The old lady is coming back to life! To finish her, I need the 17 inch long, 3 inch wide strip of aluminum that fits between side panels over the controls and front panel wiring. If you have this piece or parts unit that does, please contact me direct with cost and where I should send a check.

TNX ES 73,
Mike Steussy AE4R
Vienna VA
hikrbikr@erols.com

From: hikrbikr@erols.com
Message-ID: <356DD050.75A@erols.com>
Date: Thu, 28 May 1998 21:59:59 +0100
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Hallicrafters knob
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A few weeks ago, one of our members posted a request for the Pointer Adjust knob for his Hallicrafters SX-62A. Will that member please contact me direct? I may be able to help.

73, Mike Steussy AE4R
hikrbikr@erols.com

Message-ID: <356E1F78.8FC31E7B@sprynet.com>
Date: Thu, 28 May 1998 20:37:45 -0600
From: Steve Lords <sklords@sprynet.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: "boatanchors@theporch.com" <boatanchors@theporch.com>,
BOATANCHOR <BOATANCHORS@www.tempe.gov>
Subject: Re: need capacitors
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Sandy

i got several answers on what size of equalizing resistors to use, the arrl handbook say 100 ohm per volt i am wondering why you said a higher value, been out of touch with power supplies for a while.. (no pun intended :)
appreciate the help

thanks
steve
wa7isl :)

d

> I don't think you will find any of those anymore! I would use two
> 25 uf @ 350-450wv in series for each 12 @ 700 in the rig. Bridge them with 220K
> to 470K 1-2 watt resistors to equalize the voltage across each. That
> should work just fine.
> 73,
> Sandy W5TVW

Message-Id: <3.0.5.32.19980528222134.00868e00@pop.pipeline.com>
Date: Thu, 28 May 1998 22:21:34 +0000
To: Old Tube Radios <boatanchors@theporch.com>
From: "Lawrence R. Ware" <lrware@pipeline.com>
Subject: Re: Grimeton adventure
Cc: tell@cs.unc.edu
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 13:42 05/28/1998 -0400, Nick England wrote:

<snip>

>Chapter 1 The Seed is Planted

>Let's blame it on Larry Ware. Why not ? Last fall at the Shelby hamfest we're
>shooting the bull and I ask about the HP Wave Analyzer I saw under a
>table. "Yeah," sez Mr. Ware, "it's like a frequency selective voltmeter -
>I've got several and have even used it as a VLF receiver."

<snip>

Oh-Ho! So it's all my fault? Don't go blaming me cause you two
hailed one of those heavy monsters around...

>A little trip to the lab turns up a couple of 1500' rolls of
>govt. surplus twisted pair. Hmmm - that means we can make a 2-turn loop
<snip>

This is where his plan starts to go south....

>I plug in the \$25 Wave

>Analyzer to see what happens. A few squirts of dioxit and
>a few feet of wire hooked up to the Wave Analyzer and I'm
>hearing lightning crashes,
<snip>

Shelby was last Labor day weekend, I sent him parts for it a
week later, and now he decides to fire it up?

This is all *my* fault????

>Chapter 5 The Sacred Antenna

<snip>

>I've kinda decided that multiple wavelengths at 17.2 kc is
>going to present some challenge.

<snip>

Yep. Could be.... Should of got more wire and just hauled one end
to the coast Nick....

>the original plan is to make a
>big loop around the pasture (roughly square and 500' per side) by
>hanging the wire on the wooden fence posts.

<snip>

Nick and crew continue with "Nicks Folly." :-)

>Chapter 7 The Results

>Plug in the Analyzer, warm up the amp, and connect said Antenna to said
>Analyzer. WHOA! All kinds of noise - this is a Good Sign. Find WWVB
>at 60 kc OK. Find a really strong signal at 24 kHz that sounds like
>FSK. Hook up a frequency counter and set the gear up for 17.2 kc.
>Lots of noise. 1500Z comes and goes. No change in the character of
>the noise. We twist all the knobs on the Analyzer thingie. Nada.

<snip>

See, That's what you get for not paying closer attention....

I warned you had to use only right hand twisted pair wire with HP's
The left hand kind don't work. The left hand kind is only for
Marconi's and other English radios.... :-)

>Ah well - we had a ton of cheap fun. JP says - "So when are
>they gonna fire up that Alexandersson generator again ? What if we built
>a shielded loop ? What kind of receiver do we really need ? "
>The Hook is Set - We'll be Back !!

You have enough receiver, just not enough signal. Get right handed
shield wrap for next time too.

Epilogue 2: I used two of those HP thingies down here, one with a long
wire and the other with a shielded loop... but no joy on 17.2 for
me either.... :-)

Next year invite me up to join you... We probably still won't hear
the monster, but at least I can provide advice....

For example: I could suggest John take the wire back down and
reinstall it looped the other way... :-)

-Larry

They say:

"Madness takes its toll."
Please have exact change...
lrware@pipeline.com

Message-Id: <199805290326.UAA11578@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: need capacitors
Date: Thu, 28 May 1998 20:27:57 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Steve and all;

> Sandy
> i got several answers on what size of equalizing
> resistors to use, the arrl handbook say 100 ohm per volt
> i am wondering why you said a higher value,

All the equalizing resistors have to do is swamp the leakage current in the capacitors to get (near) equal voltage drops across the caps. Maybe a 50 microamps per microfarad at rated voltage is a reasonable leakage current to assume; less current for less than rated voltage. So each equalizing resistor should let about five times as much current flow as the leakage current per capacitor. These are just numbers I pulled out of a shady spot, some refinement needed.

One hundred ohms per volt sounds like the way to calculate power supply bleeder/equalizer resistors. Does your PS need to bleed?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

From: "Barry L. Ornitz" <ornitz@dpnet.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Nomenclature: Wrinkle, Crinkle, Crackle, Crystal, etc.
Date: Thu, 28 May 1998 23:37:32 -0400
Message-ID: <01bd8ab3\$1d2cdb60\$4994a4d1@ornitz.dpnet.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This is just a reminder that there are dozens of varieties of textured paint that were once used on Boatanchors. The majority of the finishes were "wrinkle" finishes with raised ridges sticking up from the paint

surface. The size and shape of the wrinkles is dependent on both the paint chemistry and the method upon which it is applied and cured. What we think of today as beautiful, wrinkle paint was originally used to avoid the need for a really good paint job. With the textured surface, minor imperfections in the paint are not very noticeable.

Wrinkle paint was originally based on tung oil compositions. These have the unusual property that as the paint oxidizes and polymerizes (what we call drying, but the evaporation of light solvents from the paint has nothing to do with the curing of the paint), the paint expands. As it expands, the vertical wrinkles form to take up the excess surface area. Modern wrinkle paints are based on a different chemistry (PVC, but I know nothing of the details). Most paints can be made to wrinkle to some extent by rapid heating of the painted surface before the paint cures. But since this is not the intended use for this paint, your results may vary considerably.

The crinkle finish that Dexter Francis described is quite different. This paint shrinks upon curing leaving a highly stressed surface. This surface usually tears producing little islands of paint separated by thin lines. The effect is not unlike alligator hide in texture. It was not nearly as popular as wrinkle.

Other finishes were also used in the 1930's and 1940's besides these. Some produced a fine grained texture much like hoar frost on a window in winter. Others produced very large wrinkles. Hammertone paints were also introduced in the same time period, and these finishes were also popular for electronic equipment.

Unfortunately, the exact chemical compositions of early wrinkle finish paints are virtually unknown today. While patents were granted in the 1930's to several processes, most manufacturers kept their "recipes" as trade secrets.

For those that have access to a good technical library like that of a major university, check out the two volume set "The History of Paint Technology" written in this time period. There is a lithographic plate in the book showing about 30 kinds of textures. Unfortunately, most of this is lost if you photocopy the page.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

From: Henry van Cleef <vancleef@netcom.com>
Message-Id: <199805290352.UAA19522@netcom4.netcom.com>
Subject: Re: need capacitors
To: Old Tube Radios <boatanchors@theporch.com>

Date: Thu, 28 May 1998 21:52:30 -0600 (MDT)
Cc: boatanchors@theporch.com, BOATANCHORS@www.tempe.gov
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

As Steve Lords discourses

>
> Sandy
> i got several answers on what size of equalizing
> resistors to use, the arrl handbook say 100 ohm per volt
> i am wondering why you said a higher value,
> been out of touch with power supplies for a while..
> (no pun intended :)
> appreciate the help
> thanks
> steve
> wa7isl :)
>

When I do this, I generally use 1-2 ma. bleeder current across the caps. That's 1000 to 500 ohms per volt. Also keep in mind that 1 watt metal resistors are rated at 350 volts----you'll probably need 2 in series across each cap.

--

=====
Hank van Cleef
=====

From: NBroline@aol.com
Message-ID: <3a1d31b3.356e3891@aol.com>
Date: Fri, 29 May 1998 00:24:48 EDT
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: Collins 75S3 Available
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

A friend in Austin, Texas, has an S-Line receiver that he wants to go to someone who can appreciate it. Please respond to him directly.

His description

"Collins 75S3 SN 10725

works on all bands

has 250 Hz filter and 2.1 KHz filter

cosmetically it is excellent

It needs new p/s filters as it has some hum but not bad and I don't

consider that a problem. The RF gain control may need replacing; it has a bad spot below which the receiver is dead, but again I don't consider that a real problem.

Duie K5KZQ

roth@onr.com"

Nick W5FUA

End of BOATANCHORS Digest 2072
